REMARKS/ARGUMENTS

This case has been carefully reviewed and analyzed in view of the Office Action dated 6 August 2007. The allowance of Claims 2 and 13 if rewritten in independent form including all of the limitations of the base claims and any intervening claims, as well as allowance of Claims 3-8 and 14-19 allowable based upon their dependence from Claims 2 and 13, respectively, is acknowledged and appreciated.

Accordingly, Claim 2 and 13 have been rewritten in independent form including all of the limitations of Claim 1 and 12, respectively, the base claim, and there being no intervening claims. Thus, Claims 2 and 13 should now be allowable. While it is believed that the claims respectively dependent on Claims 2 and 13 add further patentably distinct limitations, they are at least patentably distinct for the same reasons as the base claim upon which they are dependent. The dependency of Claims 20 and 21 has been changed to depend from Claim 13. Therefore, Claims 2, 10, 11 and 13-21 should now be allowable.

In the Official Action, the Examiner objected to the Specification because of an informality found therein. Accordingly, the Specification has been amended to correct the informality kindly noted by the Examiner.

Further, in the Office Action, the Examiner rejected Claims 1, 9-12, 20 and 21 under 35 U.S.C. § 103(a) as being unpatentable over Jacobson, et al., U.S. Patent 6,934,256, in view of Cheriton, U.S. Patent 7,027,393.

In contradistinction, Jacobson, et al. is directed to a method of detecting non-responsive network flows by dropping packets on a random basis using a random early detection (RED) algorithm. A classifier reads indicia of a selected flow from at least one field of a header of a packet received by the network device. The network device calculates a drop interval for packets of the selected flow dropped by the RED algorithm in response to a time at which the packets were dropped. The network device then applies a statistical test to drop intervals of a plurality of flows in order to identify the non-adaptive flow.

The Examiner admits that Jacobson, et al. fails to disclose the step of forming an aggregate from the flows according to an aggregating property at each switch of the network. The Examiner further cites Cheriton which discloses a TCP (Transmission Control Protocol) optimized rate policer that controls the rate of TCP flows over multiple networks switches/routers utilizing packet dropping in performing the rate control. Cheriton discloses implementation on individual TCP flows as well as across multiple individual flow at the aggregate flow level representing all TCP flows from a single source, thus forming a respective aggregate from the set of flows at each of the plurality of switching nodes in accordance with a corresponding one of the aggregating property. The Examiner suggested to modify the method of Jacobson, et al. by processing an aggregate of flows having at least one common property as shown by Cheriton.

It is respectfully submitted, that neither of the cited prior art reference, Jacobson, et al. nor Cheriton, teaches a method of determining the responsiveness of packet drops or conformity to a predetermined transmission control protocol in which a drop rate signature is assigned to each of a plurality of corresponding switching nodes for specifying an instantaneous drop rate, in which the assigned drop signature is orthogonal to the drop signature of all other ones of the switching nodes when each drop rate signature is compensated for a DC offset.

Independent Claim 1 has been amended to include this feature therein. As now defined in Claim 1, the method for determining the responsiveness of data transmission rate of data packets to packets dropped in a distributed communication network includes (inter alia) the steps of:

"… assigning to each of the plurality of switching nodes a corresponding drop rate signature for specifying a corresponding instantaneous packet drop rate, said drop rate signature at each of the plurality of switching nodes being orthogonal to said drop rate signature of all other ones of the plurality of switching nodes when each of said plurality of drop rate signatures are compensated for a DC offset …

… setting a packet drop rate to said corresponding instantaneous packet drop rate …

... perturbing said data transmission at perturbation intervals by intentionally dropping a number of packets according to time varying said corresponding instantaneous packet drop rate... and

... estimating the responsiveness to packet drops from a perturbed packet transmission rate measured subsequent to said intentional packet dropping"

This combination of elements now defined in the Independent Claim 1 is not suggested or disclosed in the cited prior art references taken singly or in combination. Even if combined, the cited prior art references fail to teach the claimed steps and do not make the claimed combination of elements obvious. Therefore it is believed that Claim 1, as amended, is distinguishing over the cited prior art references taken solely or in combination.

Claims 3 and 9 dependent on Claim 1 have been amended to further clarify the responsiveness estimation step and the non-conforming proportion estimating step of the method of the present invention.

Claim 12 has been canceled without the prejudice to incorporate the subject matter thereof into Claim 13.

Claims 3-9 directly or indirectly depending from Claim 1, and each is believed to add further limitations that are patentably distinct, but are at least patentably distinct for the same reasons as the base claim upon which they are dependent, and therefore should be allowable as well.

Thus, it is believed that the subject Patent Application has now been placed fully in condition for allowance, and such action is respectfully requested.

If there are any further charges associated with this filing, the Honorable Commissioner for Patents is hereby authorized to charge Deposit Account #18-2011 for such charges.

Respectfully submitted,
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Dated: 5 February 2008

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/David I. Klein/ — 2/05/2008
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